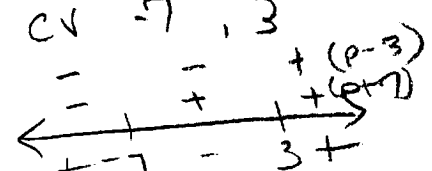


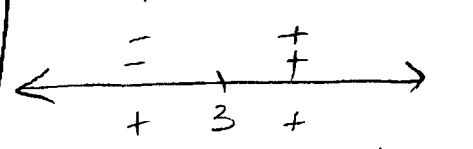
# Unit 10 Review Assignment p159-160 : 51-63, 79-89 (odd)

51  $-9x < 4x + 7$   
 $-13x < 7$   
 $x > \frac{7}{13}$   
 $(-\frac{7}{13}, \infty)$

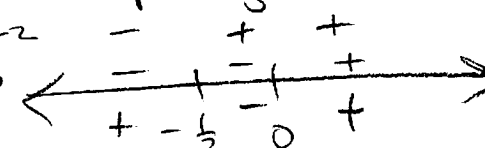
53  $-5z - 4 \geq 3(2z - 5)$   
 $-5z - 4 \geq 6z - 15$   
 $-11z \geq -11$   
 $z \leq 1$   
 $(-\infty, 1]$

55  $5 \leq 2x - 3 \leq 7$   
 $8 \leq 2x \leq 10$   
 $4 \leq x \leq 5$   
 $[4, 5]$

57  $p^2 + 4p > 21$   
 $p^2 + 4p - 21 > 0$   
 $(p + 7)(p - 3) > 0$   
 cv  $-7, 3$   
  
 $(-\infty, -7) \cup (3, \infty)$

59  $x^2 - 6x + 9 \leq 0$   
 $(x - 3)(x - 3) \leq 0$   
 cv  $3$   
  
 Almost never true.  
 Only true at  $x = 3$   
 $\{3\}$

61  $\frac{5p+2}{p} < -1$   
 $\frac{5p+2}{p} + 1 < 0$   
 $\frac{5p+2}{p} + \frac{p}{p} < 0$   
 $\frac{6p+2}{p} < 0$

Critical values  
 $6p+2=0$   $p=0$   
 $p = -\frac{1}{3}$   $p \neq 0$   
  
 $(-\frac{1}{3}, 0)$

79  $|a+4|=7$   
 $a+4=7$   $a+4=-7$   
 $a=3$   $a=-11$   
 $\{3, -11\}$

81  $|\frac{7}{2-3a}| = 9$   
 $\frac{7}{2-3a} = 9$   $\frac{7}{2-3a} = -9$   
 $7 = 18 - 27a$   $7 = -18 + 27a$   
 $27a = 11$   $25 = 27a$   
 $a = \frac{11}{27}$   $a = \frac{25}{27}$   
 $\{\frac{11}{27}, \frac{25}{27}\}$

83  $|5r-1| = |2r+3|$   
 $5r-1=2r+3$  or  $5r-1=-(2r+3)$   
 $3r=4$   $7r=-2$   
 $r=\frac{4}{3}$   $r=-\frac{2}{7}$   
 $\{\frac{4}{3}, -\frac{2}{7}\}$

85  $|m| \leq 7$   
 $m \leq 7$  and  $m \geq -7$   
 $[-7, 7]$

89  $|3r+7| - 5 > 0$   
 $|3r+7| > 5$   
 $3r+7 > 5$  or  $3r+7 < -5$   
 $3r > -2$   $3r < -12$   
 $r > -\frac{2}{3}$   $r < -4$   
 $(-\infty, -4) \cup (-\frac{2}{3}, \infty)$

87  $|2z+9| \leq 3$   
 $2z+9 \geq -3$   $2z+9 \leq 3$   
 $2z \geq -12$   $2z \leq -6$   
 $z \geq -6$   $z \leq -3$   
 $[-6, -3]$